COURSE OUTLINE

CITA 109 - INTERMEDIATE SPREADSHEETS

Prepared By: Tim Davey
A. **TITLE:** Intermediate Spreadsheets

B. **COURSE NUMBER:** CITA 109

C. **CREDIT HOURS:** 1

D. **WRITING INTENSIVE COURSE:** N/A.

E. **COURSE LENGTH:** 7 weeks

F. **SEMESTER(S) OFFERED:** Fall/Spring

G. **HOURS OF LECTURE, LABORATORY, RECITATION, TUTORIAL, ACTIVITY:** 2 lecture hours per week

H. **CATALOG DESCRIPTION:** This course is designed to increase knowledge of spreadsheet fundamentals using an industry standard spreadsheet package as the instructional platform. The student will learn to work with lists, pivot tables, object linking and embedding, developing a complete worksheet application and macro writing.

I. **PRE-REQUISITES/CO-COURSES:** CITA 108 – Introduction to Spreadsheets or permission of instructor.

J. **GOALS (STUDENT LEARNING OUTCOMES):** By the end of this course, the student will:

<table>
<thead>
<tr>
<th>Plan and create a list</th>
<th>SLO-2: Critical Thinking Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create and modify pivot tables</td>
<td>SLO-2: Critical Thinking Skills</td>
</tr>
<tr>
<td>Insert and embed objects</td>
<td>SLO-2: Critical Thinking Skills</td>
</tr>
<tr>
<td>Sort data in a list on one or more fields</td>
<td>SLO-2: Critical Thinking Skills</td>
</tr>
<tr>
<td>Create, design, and edit macros</td>
<td>SLO-2: Critical Thinking Skills</td>
</tr>
<tr>
<td>Explore external data</td>
<td>SLO-2: Critical Thinking Skills</td>
</tr>
</tbody>
</table>


L. **REFERENCES:**

M. **EQUIPMENT:** Computer lab, printer, Smartboard, LCD Projector

N. **GRADING METHOD:** A – F

O. **MEASUREMENT CRITERIA/METHODS:** Assignments and Skill Assessment Manager

P. **DETAILED COURSE OUTLINE:****

1. **Lists**
   A. Planning and Creating the List
   B. Freezing Rows and Columns
   C. Sorting Data
   D. single column sort
   E. multiple column sort
   F. Maintaining the List Using a Data Form
G. what is a data form  
H. searching for records with a data form  
I. deleting records with a data form  
J. Filters and Formulas  
K. Filtering the List with an Auto Filter  
L. simple criteria  
M. custom auto filters with complex criteria  
N. Use of Conditional Formatting  
O. Creating Natural Language Formulas  

II. Pivot Tables  
A. Creating a Pivot Table  
B. Defining the Layout of a Pivot Table  
C. Changing the Layout of a Pivot Table  
D. formatting numbers  
E. repositioning fields  
F. sorting items within the pivot table  
G. adding a field  
H. Refreshing a Pivot Table  

III. Inserting and Embedding Objects  
A. Inserting Pictures into a Spreadsheet  
B. Using Word Art to improve title appearance  
C. Creating A Company Logo on the Spreadsheet  

IV. Workbook Applications  
A. Arranging a Worksheet into Sections  
B. Entering Initial Values  
C. Validating Data Entry  
D. Specifying Data Type and Acceptable Values  
E. Specifying an Input Message  
F. Specifying and Error Alert  
G. Range Names  
H. Defining a Range Name  
I. Using a Name Box to Define a Range Name  
J. Using the Range Name in a Formula  

V. Macros  
A. Creating a Macro  
B. Using the Macro Recorder  
C. Writing the Macro using Visual Basic  
D. Planning the Macro  
E. Decide what you want to do  
F. Preplan your keystrokes  
G. Recording the Macro  
H. Activating the Macro Recorder  
I. Naming and Describing the Macro  
J. Recording the Keystrokes  
K. Activating the Macro in the Future
VI. Explore External Data
   A. Exploring External Data Sources
   B. Importing Data from Text Files
   C. Exploring Connections and Data Ranges
   D. Defining a Trusted Location

Q. **LABORATORY OUTLINE:**  N/A